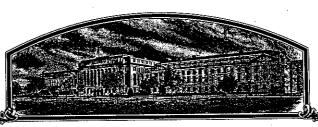
No.



8400110

## THE UNIVERD SHAVES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

# The Standard Oil Company

Cherens, there has been presented to the

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF CIGHTER YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT TY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT

CORN

'SX-5-11'

In Lestimony Winexect, I have hexeunto set my hand and caused the seal of the Plant Turisty Protection Office to be affixed at the City of Washington, D.C. this 28th day of February in

this 28th day of February in the year of our Lord one thousand nine hundred and eighty-six.

Actific Secretary of Signature

Huma Hale

Plant Variety Protection Office Agricultural Marketing Service

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE WAREHOUSE & SEED DIVISION

### APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse) 1. NAME OF APPLICANT(S) 2. TEMPORARY DESIGNATION VARIETY NAME The Standard Oil Company X - 5 - 114. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 5. PHONE (Include area code) PVPO NUMBER Midland Building (928TT) (216) 575-8460 Cleveland, Ohio 44115 6. GENUS AND SPECIES NAME 7. FAMILY NAME (Botanical) Zea Mays Gramineae 8. KIND NAME DATE OF DETERMINATION Corn December 1981 RECEIVED 10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation partnership, association, etc.) Corporation 11. IF INCORPORATED, GIVE STATE OF INCORPORATION 12. DATE OF INCORPORATION January 10 13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Charles E. Lipsey or Geoffrey M. Karny Finnegan, Henderson, Farabow, Garrett & Dunner 1775 K Street, N.W. Washington, D.C. PHONE (Include area code): 20006 14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED Exhibit A, Origin and Breeding History of the Variety (See Exhibit C, Objective Description of the Variety (Request form Section 52 of the Plant Variety Protection Act.) from Plant Variety Protection Office.) b. X Exhibit B, Novelty Statement Exhibit D, Additional Description of the Variety Exhibit E, Statement of Basis of Ownership 15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) Yes (If "Yes," answer items 16 and 17 below) 16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? No Registered Certified Foundation 18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? Yes (If "Yes," give date) 19. HAS THE VARIETY BEEN OFFERED FOR SALE OR MARKETED IN THE U.S. OR OTHER COUNTRIES? Yes (If "Yes," give names of countries and dates) 20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. SIGNATURE OF APPLICANT The Standard Company May 10, 1984

Larry

Evans

Manager, Patent & License Division

'SX-5-11' M/S Exhibit A: Origin and Breeding History of Corn Variety  $(X-5-11)^2$  1/15/85

'SX-5-11' <X-5-11' originated out of Dudley and Alexander's "Synthetic OP." The breeding method for obtaining Synthetic OP is described in J. W. Dudley and D. E. Alexander, <u>Crop Science</u>, 9:613-615, 1969. Original breeding stock was obtained from the University of Illinois in May, 1980.

The seeds of Synthetic OP were planted in May of 1980 and self-pollinations were made on the most robust plants during the summer of 1980. Self-pollinated seed from these plants were bulked and selfed in the winter of 1980-81, winter of 1981-82, winter of 1982-83, and summer of 1983. Ears were kept separate from the summer 1983 planting, and an ear-to-row planting was made during the winter of 1983-84. Acceptable uniformity was observed.

### Outline of the Development of (X-5-117 SX-5-//

Type	Description	Location	<u>Year</u>
Synthetic OP	Self-pollination	Ohio, Illinois	1980
5	Self-pollination	Florida	1980-81
5	Self-pollination	Florida	1981-82
5	Self-pollination	Florida	1982-83
5	Self-pollination	Indiana	1983
x-5-11	Self-pollination	Florida	1983-84

Addendum to Exhibit A for Corn Variety (X-5-11> SX-5-11' P/S

Two generations were judged for uniformity and stability. There were no discernible variants.

Exhibit B: Novelty Statement

5X-5-11' 45 4X-5-117 is a tetraploid Zea maize ssp. maize. Unlike diploid corn, (x-5-1) has twice the normal number of chromosomes, that is, it has 40 somatic chromosomes. Normal Zea maize ssp. maize is diploid, and has 20 somatic chromosomes. Therefore, <X-5-117 is unique on the basis of its number of somatic chromosomes, and differs from all diploid corn on this basis.

'sx-5-11'

< X-5-117 differs from Synthetic OP on the basis of its uniformity and homozygosity. Synthetic OP is a very heterogeneous population, as demonstrated by the fact that the Applicant has derived a number of novel varieties from Synthetic OP.

15X-5-11

<X-5-117differs from other tetraploid inbred lines of corn on the basis of the characteristics given in Exhibit C.

Addendum to Exhibit B for Corn Variety $\langle X-5-11 \rangle$   $\langle SX-5-11 \rangle$   $\langle SX-5-11 \rangle$   $\langle SX-5-11 \rangle$ 

The only other tetraploid varieties of which the applicant is aware are those developed by the applicant itself. X-5-11 may be compared to and distinguished from tetraploid varieties X-4-2, X-4-4, X-5-6, and X-6-3 for which applications for plant variety protection have been filed. The varieties have been assigned the following application numbers:

Variety	Application Number	
<x-4-2> <x-4-4> <x-5-6> <x-6-3></x-6-3></x-5-6></x-4-4></x-4-2>	8400117 8400116 8400114 8400118	
X-5-11 differs from:		
$\langle X-4-2\rangle$ on the basis of:		
Ring color	(2 vs. 1, respectively)*	
<pre></pre>	3 (2 vs. 1) (2 vs. 1) (2 vs. 1) (9 cm vs. 11 cm) (1486 vs. 1602) (3 vs. 1)  (2 vs!) (9 cm vs. 14 cm) (136 cm vs. 155 cm)	
-Ohio Ear height-Ohio	(218 cm vs. 245 cm) (98 cm vs. 120 cm)	
$\langle X-6-3\rangle$ on the basis of:		
Anther color Tassel branch angle COB COLOR PERICARP COLOR	(1 vs. 2) (2 vs. 1) (3 vs 1) (8 vs 1)	

<sup>\*</sup>The numbers refer to those listed for the particular characteristics on the Objective Description of Variety (Exhibit C) in the application for the identified varieties.

Amendment to Exhibit B for Corn Variety < X-5-117 SX-5-11 (Application No. 8400110)

Please amend Exhibit B to show that <X-5-11>differs from <X-4-2>on the basis of anther color (2 vs 1); that it differs from <X-4-4>on the basis of leaf color (3 vs 1); that it does not differ from <X-4-4>on the basis of cob color; that it differs from <X-5-6>on the basis of anther color (2 vs 1); that it does not differ from <X-6-3>on the basis of anther color; and that it differs from <X-6-3>on the basis of cob color (3 vs 1) and pericarp color (8 vs 1).

FORM GR-470-28 (2-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION

EXHIBIT C (Corn)

المحية محمة

HYATTSVILLE, MARYLAND 20782	kevisea	
OBJECTIVE DESCRIPTION OF VARIET		
CORN (ZEA MAYS)	<x-5-11≯< td=""></x-5-11≯<>	
NAME OF APPLICANT(S)	FOR OFFICIAL USE ONLY	
The Standard Oil Company	PVPO NUMBER	
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	8400110	
Midland Building (928TT)	VARIETY NAME OR TEMPORARY DESIGNATION	
Cleveland, Ohio 44115	1 PY 1 also	
	SX-5-1/	
Place the appropriate number that describes the varietal character of this variety in the	hove chelow	
Place a zero in first box (e-8- 0 8 9 or 0 9 ) when number is either 99 or less or	9 or less.	
1. TYPE:		
i. (Tre:		
2 1 = SWEET 2 = DENT 3 = FLINT 4 = FLOUR 5 = PA	OP 6=.ORNAMENTAL	
2. REGION WHERE BEST ADAPTED IN THE U.S.A.:		
1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST	4 = SOUTHEAST	
5 = SOUTHCENTRAL 6 = SOUTHWEST 7 = MOST REGIONS		
	omments" (pg. 3) state how	
heat unit	s were calculated)	
DAYS FROM EMERGENCE TO 50% OF PLANTS IN SILK	8 6 HEAT UNITS - Florida	
DAYS FROM 50% SILK TO OPTIMUM EDIBLE QUALITY	15471417	
DATS FROM 50% SILK TO OFTIMOM EDIBLE COALITY	HEAT UNITS	
DAYS FROM 50% SILK TO HARVEST AT 25% KERNEL MOISTURE	HEAT UNITS	
DATO THOM 30% STER TO TIAR VEST AT 25% REALIZE MOISTONE	TILAT CIVITS	
4. PLANT:		
<u>2 1 8</u> - Ohio <u>0</u>	<u>9</u> 8 - Ohio	
1 3 6 CM. HEIGHT (To tassel tip) - Florida 0	6 0 CM, EAR HEIGHT (To base of top ear)	
T 15 10 1 SWITTER TOTAL	Florida	
CM, LENGTH OF TOP EAR INTERNODE		
CM, EENOTION TO EATHER ENOUGH		
Number of Tillers: Number of Ears Per Stalk:		
· · · · · · · · · · · · · · · · · · ·		
2 1 = NONE 2 = 1-2 3 = 2-3 4 = $>$ 3 1 1 = SINGLE 2 =	SLIGHT TWO-EAR TENDENCY	
3 = STRONG TWO	EAR TENDENCY 4 = THREE-EAR TENDENCY	
Cytoplasm Type:		
	•	
1 = NORMAL 2 = "T" 3 = "S" 4 = "C" 5 = OTHER	(Specify)	
learned		
5. LEAF (Field Corn Inbred Examples Given):		
Color:	•	
3 1 = LIGHT GREEN (HY) 2 = MEDIUM GREEN (WF9) 3 = DARK GRE	EN (B14) 4 = VERY DARK GREEN (K166)	
Angle from Stalk (Upper half): Sheath Pubscence:		
$\begin{bmatrix} 1 \\ 1 \end{bmatrix} = \langle 30^{\circ} \\ 2 = 30-60^{\circ} \\ 3 = \rangle 60^{\circ} $ $\begin{bmatrix} 2 \\ 1 = LIGHT \langle 1 \\ 1 \end{bmatrix}$	W22) 2 = MEDIUM (WF9)	
3= HEAVY	~	
Marginal Waves: Longitudinal Creases:		
······· ······························	•	
2 1 = NONE (HY) 2 = FEW (WF9) 3 = MANY (OH7L) ] 1 = ABSENT	(OH51) 2 = FEW (OH56A)	
2   1 - NONE (HT) 2 - FEW (WF9) 3 - MANY (OH/L) 1   3 = MANY (I		
Width: Length:	· · · · · · ·	
[0]9]		
	R NODE LEAF	
Florida Flo	rida	
NUMBER OF LEAVES PER MATURE PLANT	7	

Exhibit E: Statement of the Basis of Applicant's Ownership

The Standard Oil Company is the employer of the plant 5x-5-11' breeder involved in the development of 5x-5-11'. The Standard 5x-5-11' pfs Oil Company has sole rights to and ownership of 5x-5-11'.

#### ASSIGNMENT

WHEREAS, I, STEVEN CHANDLER PRICE, a citizen of the United States of America, residing at 21210 Clare Avenue, Maple Heights, Ohio 44137, as assignor, have developed a novel plant variety designated Corn X-5-11; and X-5-11; and X-5-11; and X-5-11; and X-5-11.

WHEREAS, THE STANDARD OIL COMPANY, a corporation organized and doing business under the laws of the State of Ohio, whose post office address is Midland Building, Cleveland, Ohio 44115, as assignee, is desirous of securing the entire right, title, and interest in and to this novel plant variety in all countries throughout the world;

NOW THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from assignee is hereby acknowledged, I, as assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, my entire right, title and interest in and to this novel plant variety designated Corn<X-5-117 and improvements thereof, the sodesignated Application for United States Certificate of Plant Variety Protection, which was executed on riety Protection, which was executed on May 10, 1984 by assignee, and all Certificates of Plant Variety Protection of the United States which may be granted thereon, and all reissues, continuations, extensions, or renewals thereof, and all rights to claim priority on the basis of such application, and all applications for Certificates of Plant Variety Protection or applications for similar rights, however denominated, which may hereafter be filed for this novel plant variety in any foreign country and all Certificates of Plant Variety Protection or other rights which may be granted on this novel plant variety in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Secretary of Agriculture of the United States and any official of any foreign country whose duty it is to issue certificates on applications as described above, to issue all Certificates of Plant Variety Protection or other rights for this novel plant variety to assignee, its successors and assigns in accordance with the terms of this Assignment:

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment:

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with assignee, its successors and assigns, any facts known to me respecting this novel plant variety, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this novel plant variety in said assignee, its successors and assigns, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns to obtain and enforce proper certificate protection for this novel plant variety in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.



I authorize my attorney to insert on this assignment cation when known.	(s), <u>Joseph G. Curatolo</u> the date of execution of said appl
IN TESTIMONY WHEREOF, I day of, ]	have hereunto set my hand this 1984.  Charles Func (Signature of Assignor)
COUNTY OF CUYAHOGA	) ) ss.
Subscribed and Sworn to	before me this 9th day of  Munding Frolly Notary Public
(SEAL)	SUSAN MUNDING FROLLO Notary Public STATE OF OHIO My Commission Expires August 24, 1985
Witnesses:	
Patricia a Salvaggio	